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FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. FILING DATE 10/02/2003 10/677,183 Zev Kopel 6239-16 8306 4897 7590 05/03/2005 **EXAMINER** ROBERT C. KAIN, JR. **BUSHEY, CHARLES S** 750 SOUTHEAST THIRD AVENUE ART UNIT PAPER NUMBER SUITE 100 FT LAUDERDALE, FL 333161153 1724

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Appli	cation No.	Applicant(s)		
		77,183	KOPEL ET AL		
Office Action Summa			Art Unit		
		Bushey	1724		
The MAILING DATE of this con		<u> </u>			
Period for Reply	,,,,,a,,,oano,, appouro o				
A SHORTENED STATUTORY PERITHE MAILING DATE OF THIS COM  - Extensions of time may be available under the proafter SIX (6) MONTHS from the mailing date of the lifthe period for reply specified above is less than  - If NO period for reply is specified above, the maxi  - Failure to reply within the set or extended period for any reply received by the Office later than three nearned patent term adjustment. See 37 CFR 1.70	MUNICATION.  ovisions of 37 CFR 1.136(a). In a  is communication.  thirty (30) days, a reply within the  mum statutory period will apply a  or reply will, by statute, cause the  nonths after the mailing date of the	no event, however, may a reply be ting e statutory minimum of thirty (30) day and will expire SIX (6) MONTHS from e application to become ABANDONE	mely filed  ys will be considered timely.  the mailing date of this communication.  ED (35 U.S.C. § 133).		
Status					
1) Responsive to communication	s) filed on <u>11 March 20</u>	<u>005</u> .			
2a)☐ This action is <b>FINAL</b> .	2a) This action is <b>FINAL</b> . 2b) This action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the	practice under Ex parte	e Quayle, 1935 C.D. 11, 4	53 O.G. 213.		
Disposition of Claims					
4)⊠ Claim(s) <u>1-29</u> is/are pending in	the application.				
4a) Of the above claim(s) 28 ar	- ·	from consideration.			
5)⊠ Claim(s) <u>1-8</u> is/are allowed.					
6)⊠ Claim(s) <u>9,10,16 and 20-23</u> is/s	are rejected.				
7)⊠ Claim(s) <u>11-15,17-19 and 24-2</u>	7 is/are objected to.				
8) Claim(s) are subject to	restriction and/or election	on requirement.			
Application Papers					
9)⊠ The specification is objected to	by the Examiner				
10)☐ The drawing(s) filed on i	•	or b) objected to by the	Examiner.		
Applicant may not request that an					
Replacement drawing sheet(s) inc	•	• •			
11) The oath or declaration is object	ted to by the Examine	r. Note the attached Office	e Action or form PTO-152.		
Priority under 35 U.S.C. § 119					
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12) Acknowledgment is made of a ( a) All b) Some * c) None		/ under 35 U.S.C. § 119(a	i)-(a) or (ī).		
		heen received			
<ul> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> </ul>					
3. Copies of the certified copies of the priority documents have been received in Application 116.					
application from the Inte	•		od III alio Malional Glogo		
* See the attached detailed Office			ed.		
		•			
Attachment(s)					
1) Notice of References Cited (PTO-892)		4) Interview Summary			
2) Notice of Draftsperson's Patent Drawing Re 3) Information Disclosure Statement(s) (PTO-1		Paper No(s)/Mail D 5) Notice of Informal I	Pate Patent Application (PTO-152)		
Paper No(s)/Mail Date <u>10-2-03</u> .	or r 10/00/00/	6) Other:	· · · · · · · · · · · · · · · · · · ·		
U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)	Office Action Su	mmary	Part of Paper No./Mail Date 0405	-J	

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### **DETAILED ACTION**

### Election/Restrictions

Applicant's election without traverse of Group I, claims 1-27 in the reply filed on March
 2005 is acknowledged.

## Specification

2. The disclosure is objected to because of the following informalities: 1) page 1, last line, "a immerged" should be replaced by --an immersed--; 2) page 6, paragraph [0022], immerged" should be replaced by --immersed--; 3) page 6, paragraph [0023], "emerged" should be replaced by --immersed--.

Appropriate correction is required.

## Claim Objections

3. Claim 5 is objected to because of the following informalities: On the penultimate line of claim 5, "therebeneath" is misspelled. Appropriate correction is required.

### Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 9 and 10 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by McLane (Fig. 3).

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With respect to instant claim 10, the canister (25) of the reference apparatus is clearly secured to ancillary structures, which maintain the canister structure in a fixed location and thus such structures anticipate the broadly recited main frame.

6. Claims 16, and 20-23 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by West (Figs. 1, 4, and 5; col. 2, lines 10-11; col. 5, lines 24-40; col. 7, lines 32-45).

Applicant should note that the reference teaches that the flame may be infinitely variable through modulation, and thus the reference clearly envisaged modulation of the flame between radiant mode and blue flame mode. Furthermore, the reference teaches injection of the flame into the tube bundle, thereby at least partially placing the combustion chamber within the evaporative tank (tube/shell exchanger). Lastly, the burner as shown in Figure 4, clearly includes a choke and in view of the disclosure at col. 5 of the reference, the injected cooling layer of air within the flame area anticipates the limitations of instant claims 20 and 21. With respect to the gas flow speed of instant claim 22, such is a process limitation that is not seen to limit the apparatus structurally and thus cannot be given patentable weight.

#### Allowable Subject Matter

- 7. Claims 1-8 are allowed, since the prior art of record fails to disclose or suggest the specific canister and movable frame structure of instant claim 1.
- 8. Claims 11-15, 17-19, and 24-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The claims are allowable based upon the subject matter set forth by instant claims 11, 17, and 19.

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#### Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant should note Kushch et al (col. 16, lines 13-21) wherein it is disclosed as conventional to operate a burner in a modulated manner between radiant and blue flame mode.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Bushey whose telephone number is (571) 272-1153. The examiner can normally be reached on Monday-Thursday 6:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Scott Bushey Primary Examiner Art Unit 1724

csb 4-28-05

4-28-05